



# **Strategic Math Support Classes**

Waterford High School, California • June 2008

Topic: Turning Around Chronically Low-Performing Schools

Practice: Focus on Instruction

## **Highlights**

- Building core algebra support classes into the school day resulted in striking improvements in student achievement at this school.
- The two algebra support teachers collaborate, studying achievement data and sharing instructional strategies.
- One of the support teachers teaches the classes in English and Spanish.

### **About the Site**

Waterford High School Waterford, CA

#### **Demographics**

55% White

40% Hispanic

1% Asian

1% Black

46% Free or Reduced-Price Lunch



13% English Language Learners9% Special Education

Waterford High School had several components to its successful turnaround process:

- Collaborative agreement on the school's mission statement, which includes the school's vision, beliefs, and expected student outcomes
- Collaborative decision-making processes as part of creating new instructional norms for the school
- Use of a data-driven approach and collaboration among teachers in planning instruction

#### **Full Transcript**

On screen: Strategic Math Support Classes at Waterford High School

On screen: Waterford High School placed strategic Algebra support classes into the master schedule.

Don Davis: Students will be placed in a core algebra class, and we will put their support in the students' school day—right in their school day, not after school tutoring or before school tutoring. It's part of the school day. They lose an elective. And the results were dramatic. We had a 7 percent proficiency and advanced rate. That grew to 33 percent after one year of intervention. The power of the intervention is that kids are going to be prepared for a standard that they are going to learn in the future. They are also going to have some reteaching of previously learned material and some remediation of some more basic math skills that they need to have and internalize.

On screen: Waterford High School assigned the strategic Algebra support classes to two teachers, one of whom offers the support in English and Spanish.

On screen: Collaboration between the core Algebra support teachers is critical to the success of the support classes.

On screen: The Math Department at Waterford High School chooses to meet each Friday morning prior to the start of school.

On screen: They study data from the week, identify critical standards to target, schedule instruction, plan homework, design assessments, and share instructional strategies.

Ed Rapinchuk to colleagues: Those are the three that need it the most.

Teacher: Those are definitely mine as well. Maybe also 12.

Teacher: I'm looking at class averages. So mid-70's for 12, which wouldn't hurt reviewing.

Rapinchuk: Mid-70's, and they need an 80.

Teacher: So, what did we decide? 12 and 13.



Teacher: 21 and 23.

Maria Salgado: I wanted to mention that for the Pythagorean theorem, I brought out—remember from the CAHSEE—the anchor problems?

Teacher: Oh, yeah.

Salgado: I brought those out, and I started working on those. So they need to do the critical thinking. I don't know if you have a copy? It's a combination of circle and rectangle and triangle, so being able to calculate feet and meters, meters into feet. So, being able to pave the playground. They have to figure out area and perimeter. So, just a combination of...

Teacher: Lots and lots of skills.

Salgado: Mm hmm, and pulling it all together. So, I brought that one out. I'll get you a copy of that if you want.

Salgado to class in Spanish: Para terminar con eso, les voy a dar otro ejemplo para que ustedes mismos...para que ustedes solos, en grupos de tres, van estár trabajando para poder a investigar cuanto nos va a costar poner pasto-- poner el zacate, por decir--en esta área y también con otro borde. Así es que ya practicamos uno juntos, ya los llevé por los pasos...

[In English subtitles: In order to finish with this, I'm going to give you another example so that on your own, in groups of three, you will be working to investigate how much it will cost to place the sod—place the grass, so to speak—in this area and also with another border. So, we've practiced one together, I took you through the steps…]

Salgado to class in English: I took you through the steps, and then in groups of three you're going to be able to figure out how much it's going to cost you to put the sod, the grass and to put a border around this area.

On screen: The Stanislaus County Office of Education wishes to thank the students and staff of Waterford High School for their assistance in the making of this video.